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North Carolina
Coastal Federation

3609 Hwy 24 (Ocean)
Newport, NC 28570

Phone: (252) 393-8185
FAX: (252) 393-7508

To Mickey Sugg	From Tim Stephenson
Organization	
Fax Number	Date 12/3/02

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COMMENTS

As you requested.

POSITION STATEMENT ON SAND MINING IN INLETS

Mining inlets for sand is risky business. Several existing inlet mining projects in North Carolina are causing increased beach erosion that is damaging private and public properties. Fish and wildlife are also being harmed. Before future mining projects are approved, permit applicants must assume the burden of proving proposed mining projects are environmentally acceptable. Regulatory agencies must also demonstrate that they have the capacity to anticipate the environmental consequences of mining activities, and to consistently enforce permit requirements.

Tidal inlets are among nature's most dynamic coastal environments, opening and closing in response to storms and, in some cases, migrating long distances back and forth along barrier shorelines. Linking ocean to sounds, inlets are crucial conduits for exchange of water, sediment and marine life. Natural shifts in inlet locations are associated with some of the highest ocean erosion rates in North Carolina.

Most inlets contain large reservoirs of sand, derived from the littoral transport system, and are therefore tied to the adjacent barrier islands. These distinctive shoals occur on both the ocean and sound side of the inlet, are referred to, respectively, as ebb tidal deltas and flood tidal deltas. Shoals exposed to waves and strong currents are in constant motion, exchanging and redistributing their sediments. Adjacent shorelines both on the beach and back along the sound are constantly receiving and losing sand that is released and captured by these deltas.

Many of North Carolina's 22 tidal inlets are dredged to meet navigational needs. A few inlets have also been dredged or realigned to protect coastal property. Dredging inlets disrupts the longshore sand-sharing system by trapping sand in deep, recently dredged channels. Dredging can also change the symmetry of an inlet, influence the pattern of incoming waves, and alter the natural "breakwater effect" of the ebb tidal delta.

Some beach communities view inlets as readily accessible sources of high-quality sand that can be mined to rebuild their eroded beaches. Altering an inlet system by removing sand can have substantial and unpredictable environmental impacts. The mining of Shallotte Inlet in 2000-2001 to provide sand to Ocean Isle Beach has been blamed for the loss of more than 300 feet of beach, dunes and plant life on the western end of Holden Beach in an area that had been accreting prior to the project. At Mason's Inlet, the relocation and widening of the inlet has caused a portion of the Atlantic Intercoastal Waterway to fill in with sand after just a few months, rather than a few years as forecast. Moreover, bird nesting areas adjacent to the inlet have not been managed in accordance with permit requirements, resulting in the loss of an entire nesting season for endangered bird species. NCCF does not believe that state and federal agencies have demonstrated that they have the capacity to comprehensively evaluate inlet alteration projects and to follow through on permit conditions made to mitigate environmental impacts.

Therefore, before any more mining projects are authorized, applicants must assume the burden of proving that their projects will not cause unacceptable environmental impacts. In addition, state and federal agencies must demonstrate that they will enforce permit requirements already placed on projects they've approved. Moreover, state and federal agencies should require all projects that propose to mine inlets for beach quality sand or to realign inlet channels to meet the following conditions:

- 1) **Environmental Impact Statement (EIS)** – An EIS must be conducted under the NC Environmental Policy Act or National Environmental Policy Act for any project that proposes to dredge or otherwise manipulate an inlet, tidal delta or adjacent estuarine area for the purpose of: a) relocating an inlet or channel, b) expanding the depth or width of an existing, authorized navigation channel; or, c) constructing or maintaining a beach fill project.
 - a. All secondary and cumulative impacts must be identified and adequately addressed in the EIS, including those impacts that could affect estuarine or offshore fisheries resources, onshore and offshore threatened and/or endangered species, critical habitats, and the sediment budget on adjacent islands and mainland areas;
 - b. All site-specific uncertainties of the implications must be modeled and corrected in the EIS prior to project approval, especially those impacts that are related to wave refraction and "draw down" of the ebb tidal delta; and,
 - c. A comprehensive inlet management plan must be developed for the inlet and included as an attachment to the EIS.
 - d. Environmental documents must adhere to the sequencing procedures that require avoidance, minimization, and finally compensation, including mitigation of impacts. All opportunities to avoid and minimize the long-term and multiple environmental impacts associated with inlet projects must be exhausted prior to compensating or mitigating for such impacts.
- 2) **Ecosystem monitoring and protection plan** – Ecosystem monitoring must be conducted prior to, during and for several years following an inlet alteration project. Pre-project, and post-project monitoring must be of sufficient duration and repetition to allow for an accurate comparison of conditions and understanding of impacts to the ecosystem. Independent experts in biological, physical and geological sciences should be engaged to develop and implement the monitoring plans during each season of the year and the plan must be peer reviewed prior to approval. Plans must require project sponsors to patrol newly created habitat to insure that humans or animals do not harass threatened and endangered species.
- 3) **Strict adherence to CAMA & US Army Corps of Engineers regulations, CAMA land use plans and state and federal water quality standards.**

- 4) **State mining permit** – If sand is to be removed from the inlet system, then a state mining permit must be secured.
- 5) **Removal of sand bags** – When an inlet alteration project is completed, all existing shoreline stabilization devices such as sandbags must be removed from the inlet hazard zone.
- 6) **Thorough evaluation of economic considerations** – The need for a nearby source of beach compatible sand must not be used as the overriding justification for an inlet-dredging project. Economic benefit, while relevant, must be compared to environmental cost.
- 7) **Acceptable mitigation strategy with financial assurances** – Mitigation must be planned and anticipated for both the expected and unexpected environmental impacts of inlet dredging projects. The project sponsor must be bonded and financially responsible for all mitigation, whether expected or unexpected. A detailed mitigation plan and timetable must accompany the CAMA permit with specific punitive actions for failure to comply on time.
- 8) **Prohibition of monetary, or other financial, gains from the private sale or exchange of public trust resources** – Sand removed from an inlet system is the property of the state. The Department of Administration must not allow private entities to sell or exchange ocean, inlet or estuarine sand without fully compensating the state.
- 9) **Proven track record** – Project applicants and engineering firms must have a proven track record with compliance with previous permit conditions. If permit conditions have not been met, then renewal of the applicant's CAMA permit must be disapproved.
- 10) **Public sponsorship of projects** – Inlet dredging projects must be sponsored by both adjacent municipalities.
- 11) **Approval of adjacent landowners** – Prior to issuing a CAMA permit for inlet dredging, the approval of adjacent property owners must be secured, including those owning property in the flood tidal delta and the barrier islands on both sides of the inlet.